
Columbia Basin Collaborative Integration/Recommendations Group

Meeting Summary

April 20th, 2023, 9:00am – 4:00pm PT/ 10:00pm – 5:00pm MT
Hotel Garden Inn, Portland, OR

Welcome, Opening Remarks, and Agenda Review

Liz Mack, Kearns & West, opened the meeting and invited Kat Brigham, Confederated Tribes of the Umatilla Indian Reservation, to provide the opening prayer. Kevin Scribner, Conservation Representative, delivered opening remarks.

Review Recommendations

Predation Recommendations

Pinniped: Enhancements and modifications to the existing Marine Mammal Protection Act Section 120 Pinniped Removal Program

Liz introduced the predation work group recommendations and invited Art Martin, Oregon Department of Fish and Wildlife (ODFW), to provide an overview of the pinniped recommendation. This recommendation lays out a plan to stabilize and expand funding for the joint management and removal of California Sea Lions (CSLs) and Steller Sea Lions (SSLs) under the Marine Mammal Protection Act in the area between the Bonneville Dam and the I-205 bridge on the Columbia River. The funding would go towards updating removal equipment, acquiring additional funding, maintaining an on-call veterinarian, and pursuing research and development into lethal tributary removals and the use of darts. The aim of this proposal is to reduce the number of CSLs and SSLs that eat up to 25% of the steelhead run at Willamette Falls each year and improve adult returns and abundance monitoring in the river.

The group had the following input.

- Question: Will we be able to trap animals via darting?
 - Answer: *Darting has not worked properly in the past. However, ODFW wants to pilot and evaluate a program to dart and remove animals, but the agency currently only has authorization for removal down to the I-205 bridge. Removal below that area would require extensive monitoring and expanded authority.*
- Does this recommendation consider predation on juvenile salmon?
 - Answer: *This recommendation is focused on adults, since California Sea Lions and Stellar Sea Lions eat adult fish.*
- Question: Is there a conservation concern regarding the pinniped population?
 - Answer: *These animals have protection and are managed under the Marine Mammal Protection Act and that bill comes with a requirement to consider what the protected populations are doing, so that conservation status is accounted for when the permit is issued. One part of the new revised authorization is to get rid of the requirement that requires tagging of pinnipeds to reduce the phenomenon of duplicative counts.*

- Work group members discussed the 6% mortality rate of salmonids as noted in this recommendation. One member stated that 6% is a conservative estimate and that the actual rate is unknown. Another member suggested capturing this uncertainty in the recommendation. Another member stated that reducing the mortality rate for early-arriving fish in Idaho specifically is an interest. One member questioned how much the proposed program would reduce the mortality rate.
 - *Answer: The 2-6% estimate is across all stocks. The 22-50% estimate is specific to spring Chinook. ODFW estimates that the predation rate could be as high in other stocks but that isn't known for sure. The current evidence is within a small control area. Another member noted that a different agency in the basin estimated that 25% predation occurred downstream of Bonneville dam. That 25% was across all species, 50% of that were spring Chinook. Additionally, sea lion numbers fluctuate over the years.*
- One member noted that this predation threat goes beyond salmon and applies to other important animals in the basin, such as sturgeon and eel.
- Multiple members agreed that more robust monitoring would help this effort. Some members noted that if extensive monitoring was put into place, then monitoring beyond CSLs and SSLs should be considered.
- One member acknowledged the sensitivity of this issue and explained that, in terms of funding, some entities are not comfortable with funding the removal of the mammals, but there are entities that are comfortable funding the equipment.
- Members discussed the funding component of this recommendation. One member suggested developing a strategy that clarifies that this plan will require more money than the amount asked for at this moment. The Pinniped Removal Program currently has approximately two million dollars per year and there is also a \$300,000 annual grant from the National Oceanic and Atmospheric Administration (NOAA). This recommendation seeks to stabilize that funding. The return on investment for this recommendation is very high as it is a relatively small investment for what is estimated to be a large decrease in predation on salmon.
- One member emphasized the need for a comprehensive approach to address the issue of sea lions and called for outreach and education on the subject in line with the CBC's social, cultural, economic and ecological (SCEE) values.
- Members discussed adding language to this recommendation. One member stated they would like to see "maximum use of existing authority" in the recommendation as well as an extensive monitoring program.
- Members shared support for expanded monitoring below the I-205 Bridge to support expanding the permit coverage area below the bridge if that is determined to be necessary.

Liz summarized the conversation by noting that members would like to maximize the authority of the existing program and would like to see that expanded below the I-205 Bridge in an expanded permit. In addition, Liz noted that members are interested in an expansion of this program in terms of outreach and education for the public. None of the I/RG members expressed an objection to the recommendation. Once further language is added in, the updated recommendation will be circulated to the group for final review.

Avian: Management of double-crested cormorants in the Columbia River Estuary

Liz introduced James Lawonn, ODFW, to present the double-crested cormorants recommendation. He explained that this recommendation aims to manage the population of double-crested cormorants in

the area, as they are believed to be predating on steelhead and salmon at a rate 1.7 times higher than previously thought. The goal is to discourage cormorants from the Astoria-Megler Bridge and redirect them to East Sand Island, where they will eat less salmon. Non-lethal techniques will be used to avoid scattering the cormorants and potential public relations issues. Adaptive management will be crucial to the success of this plan, as there is uncertainty about the effects on the estuary food web and potential changes in predation by other animals. The plan involves coordination among various entities but does not specify who will perform or fund the work. He stressed that the cormorant population has been causing issues for eight years without effective management.

The group had the following input:

- Question: Are there natural predators on East Sand Island?
 - *Answer: Yes, bald eagles live on the island, but it is unclear what kind of role they would play in a reintroduction campaign. Biologists have shared that disturbances to the cormorant efforts could be managed and that this action could work.*
- Question: Does this plan consider pelicans?
 - *Answer: ODFW is considering pelicans, but they are not addressed in this plan. There are five types of birds consuming salmon and the agency plans to develop plans to address their predation in the future.*
- Question: What do we know about the percentage of hatchery/wild fish consumed by these birds?
 - *Answer: It varies. In the Upper Columbia, cormorants consume both. For releases lower in the basin, it does appear that cormorants have high predation rates on those releases, including up to 60% for some of those releases near the colony.*
- Question: Why has this recommendation not been carried out already?
 - *Answer: It is a complicated effort. Cormorants are scattered across an administratively diverse landscape so a lot of officials need to come together which can be challenging.*
- One member noted that the Oregon Department of Transportation (ODOT) is planning to repair damaged steel and repaint part of the Astoria-Megler Bridge this Summer and it would be beneficial to dovetail that effort with this recommendation.
- One member commended the section of the recommendation that outlines the uncertainties with this action and requests for a robust monitoring component to be included in the plan.
- One member noted that cormorants consume both hatchery and wild fish, with high predation rates on releases lower in the basin.
- Suggested revisions to the recommendation included highlighting the need for regional coordination among entities, as well as the need for increased funding.

The I/RG Representatives conceptually supported this recommendation moving forward with the above changes.

Piscine: Develop and fund a robust Columbia River northern pike and invasive non-native fishes monitoring project.

Liz introduced Holly McLellan, Confederated Tribes of the Colville Reservation, to review the northern pike recommendation. She discussed the need to treat invasive non-native fish differently from native fish and highlighted the gap in sharing data across the basin. This recommendation would take action to prevent northern pike from entering the waters of the Columbia River in the first place and would also bolster outreach and education to inform the public about their threat. Holly noted that different

reservoirs have different managers, goals, and interests which has been an issue. This recommendation also calls for continued funding of current programs that suppress pike. The I/RG members had the following input:

- I/RG members clarified that northern pike are invasive and are often confused with northern pike minnow.
- I/RG members discussed the outreach aspect of this recommendation. Several members emphasized the importance of outreach to inform people about the importance of removing northern pike and not re-releasing them due to their detrimental impacts on native species. Holly agreed that outreach is important and plans for public outreach need to be put together.
- One member clarified that agencies are not at the point of culling pike yet. One member raised concerns about the enforcement of sports regulations and suggested adding monitoring and enforcement to the proposal.
- One member expressed concern about the return on investment of preventing invasive northern pike and the overall cost of the proposal. Another member clarified that the proposal would only commission studies and encourage the development of rapid response plans.
- One member stated the need for better enforcement of angling rules. One member suggested involving enforcement in future conversations on this topic to identify unknown issues.

Liz summarized the discussion, stating that while there was additional language that needed to be added, the I/RG members did not share any opposition to the concept moving forward with the above edits.

Piscine: Develop and initiate testing of a comprehensive piscine predator monitoring and evaluation program

Grant Waltz, ODFW, presented briefly on the topic of piscine predator monitoring and evaluation in the basin. Monitoring and evaluation are needed to guide adaptive management and determine how current efforts are performing relative to CBC goals. At present, there is no adequate monitoring and evaluation program to look at piscine predation at the required scale in the mid/lower Columbia. Such a program would provide sufficient data on piscine predation and the consumption of juvenile salmonid stocks, and scalable data could be piloted for future action items. Technical experts will be needed to generate a study designed to produce results that will inform piscine predation management. The testing and implementation of said study is distinct from this recommendation and should be a future action item. CBC endorsement of this recommendation could help secure necessary support to get action items started.

The group had the following input:

- Members highlighted the importance of including shad in the study, given that smolts are observed in habitats where shad has been removed as well as the current growth in the shad population. Grant shared that the current emphasis is on the three largest, and most studied, piscine predators in the Lower Columbia: pikeminnow, bass, and walleye. Shad have not been excluded and the recommended study could be applied to assessing predation by shad.
 - Members suggested developing a separate recommendation focused on shad.
- Members noted that developing the recommended studies would present opportunities to increase monitoring and evaluation in other regions of the basin. Members also agreed that increased monitoring and evaluation would support a greater understanding of the ways salmon

populations respond to predator removal and bolster the effectiveness of future responsive actions.

- Members shared that work group collaboration has been beneficial for identifying viable actions.
- Members suggested that this program could compare the efficacy of industrial methods for predator removal with bounty programs. Members shared support for translating this recommendation, and the proposed studies, into action steps detailing how the data will be used.
- Members also suggested a bounty or buyback program for piscine predators. Members suggested that tying the study directly to management actions would serve to strengthen the recommendation.
- Multiple members discussed outreach regarding impacts of non-native fish. One member noted that Tribes harvest walleye which are, in addition to smallmouth bass, popular within sport fishing.
 - Past attempts to remove these species have been blocked by the states, and changes in regulations will require a strong case to be made for removal.

Liz summarized that there was additional language that needed to be added regarding regional coordination on the design of this study and enforcement of regulations. With those changes, none of the I/RG members were opposed to this concept moving forward.

Habitat Recommendation

Implement NOAA 5-Year Review: Support, implement, and enhance the recommendations from the NOAA 5-year reviews. Fully fund and implement specific habitat related actions.

John Foltz, Snake River Salmon Recovery Board, discussed the recommendation to implement actions identified in the NOAA 5 Year Review. The Review consists of recommendations for the basin, addressing policy and regulation concerns. These actions could be implemented in the short term and are a subset of Endangered Species Act-recovery plans that span the range of the CBC. While actions would be insufficient to reach mid-level Columbia Basin Partnership (CBP) goals, they would complement existing recovery efforts and move habitat restoration forward. The recommendation has two appendices: 1) specific actions pulled from the reports, 2) a table that shows infrastructure and action gaps for groups that are already engaged in this work, as well as locations to implement said actions. The second appendix can be used to identify and implement specific actions, as well. John noted that some actions are broad while others are specific, and that the value-add of the CBC is to streamline these actions so that they get to the right people, as well as advocating for funding and capacity to move forward.

The group had the following input:

- Members discussed the funding needed to implement the actions identified in the recommendations. It was noted that language should be included that is explicit in stating that this recommendation is a starting point and will not achieve CBP goals on its own.
- Members highlighted the importance of viable habitat as foundational for other recovery efforts.
- It was noted that the recommendation included actions specifically related to water quality.
- Members discussed the importance of building trust with implementers and stakeholders if these actions are to be successful.

- Members shared concerns about prioritizing the actions outlined in the recommendation if the potential efficacy of those actions is currently unknown.
- A member suggested focusing on developing a better understanding of where habitat is a limiting factor and taking a specific geographic focus.
- Habitat restoration is costly and will require cooperation with willing landowners. Members recommended including language that highlights the potential, holistic, benefits of these actions for the basin.
- One member noted that they felt that the return on investment of the NOAA five-year recommendations are somewhat unclear. They noted that some of these recommendations lacked a specific geographic focus. They stated that the prioritization of actions felt unclear.
- Members discussed whether this recommendation is strengthened by integrating it with other recommendations from different work groups.

Members agreed to return the recommendation to the Habitat work group. Members of the I/RG would work alongside the work group members to refine language and address concerns.

Hydropower Recommendation

Assess natural origin run timing

Liz introduced Keely Murdoch, Yakama Nation Fisheries, to review the proposed hydropower recommendation. Keely explained that this recommendation would fund studies to assess natural origin run timing, specifically in regard to spill from dams. Spill occurs at certain times and more data is needed to understand if spill is effective for passage of early migrating natural origin fish. With a better understanding of migration patterns, spill could be adapted.

The group had the following input:

- Question: If runs reach the higher CBP goal levels, would that affect the diversity of fish?
 - *Answer: Yes, it is anticipated that higher abundance may lead to a different species composition of fish than we currently have.*
- Question: What does the funding in this recommendation specifically go towards?
 - *Answer: Initially this money would likely be used for funding PIT tag receivers or monitoring. In areas where monitoring infrastructure currently does not exist there would need to be basin-wide coordination to develop said infrastructure.*
- Question: Is this focus also looking at the back end of migration?
 - *Answer: At this time, this recommendation is just focused on early entry.*
- Question: Increased data collection may require improvements to facilities. Which facilities would those be?
 - *Answer: That's unclear right now. The next step would be to do regional coordination to develop a monitoring plan and use those to develop further recommendations.*
- One member noted that data shows the spill provided for fish is having positive impacts, but there has been resistance from dam operators in providing earlier spill.
- Several members stressed the need for monitoring to understand fish patterns. One member noted that recent data from the state of Washington show that some populations of fish are going into the mainstem earlier than previously thought.

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- Members discussed if it was possible to have a uniform tagging system that tracks fish throughout the whole basin, rather than using different types of tags. Keely explained that the PIT tagging system is the closest thing to that at this moment and that the Hydropower Work Group is working on a recommendation to make the detection system more robust.
 - One member acknowledged the data gap the recommendation is addressing and suggests that having a complete data picture will be critical to further understanding the issue.

Liz asked the group if there was consensus on this recommendation to which the group agreed there conceptually was. Liz then explained that Kearns & West would circulate new text of all the recommendations and coordinate with federal entities to develop language that could address their position relating to the FMCS process and these recommendations.

Other Work Group Updates

Liz shared that the Science Integration Work Group (SIWG) has developed two concepts that they would like the I/RG to provide feedback on to help the SIWG determine if they should move forward and develop these concepts into recommendations.

SIWG Concept #1: Study Carrying Capacity of the Columbia River

Liz introduced the concept of studying carrying capacity and outlined the proposed phased approach.

The group offered the following input:

- Question: Who are the members of the SIWG?
 - Answer: *It is a large list of people, similar to the other CBC work groups. The roster is available online.*
- Question: Who would perform the analysis of these data?
 - Answer: *That is not known at this time.*
- One member stated that they would like to see a ballpark estimate on how long and how much it would cost to conduct a large-scale ecosystem study on carrying capacity.
- One member objected to the study of carrying capacity focusing solely on fish and insisted that it should also consider the carrying capacity of the land. One member suggested reducing the scope of the study.
- Multiple members expressed a hesitation to support this recommendation due to an unclear return on investment.
- One member expressed concerns about the lack of linkage to CBP goals and critical questions that the study would answer.
- One member supported the use of existing data collected for other studies rather than starting from scratch.

SIWG Concept #2: Develop a structured decision-making framework

- Liz shared SIWG Concept #2 and encouraged I/RG members to share their feedback in a written format following the meeting in the interest of time.

Liz shared that Kearns & West would send a survey to the I/RG to obtain additional feedback in writing on these two concepts for the SIWG.

Hatcheries and Harvest Work Group

Liz reported that the Hatcheries and Harvest group had not come to a consensus on their discussions. The group has discussed a harvest concept and needs more time to further develop and refine it into a recommendation. One hatchery recommendation had a lot of support but did not reach full consensus, so more time is needed for deliberation in the group. I/RG members had the following input:

- Question: If the work group tries to reach consensus and fails, is it possible for the recommendation to then come to the I/RG for review?
 - *Answer: As stated in the Charter, The I/RG can develop recommendations or send prioritized information requests to the work groups.*
- One member expressed frustration that the hatchery recommendation did not move forward due to funding promises that have been made and unmet for the past 30 years. They suggested moving it back to the hatchery work group with clear rules and sideboards or it should move directly to the I/RG. Other members agreed that it was critical that the hatchery recommendations move forward.
 - Liz noted that the work group needs additional time for their deliberation and that it is important to maintain the CBC process. However, if the Hatchery Work Group is unable to come to consensus on any recommendation, the I/RG can provide additional direction to the Work Groups about a topic.
- One member stated that the backlogged hatchery maintenance would meet the group's goals in accomplishing the climate resiliency component of the CBC.
- One member emphasized that there were legitimate concerns being discussed in the hatchery work group.

Check in on SCEE and Public Forum Concept

Liz shared that the SCEE/Public Forum concept conversation will be postponed to a separate virtual session of the I/RG in the coming months.

Proposed Revisions to CBC Process

Liz introduced Rob Masonis, Conservation Representative, to highlight his proposed changes to the CBC Charter. Rob stated that he felt to achieve the CBP goals, there needs to be a focus on members operating with stock-specific goals that vary across the basin. However, the current structure of the collaborative is siloed and does not lend itself to developing stock-specific plans. He expressed concern about overpromising and underdelivering and emphasized the need to avoid making unrealistic recommendations. Rob stated he had concerns about the level of expertise of work groups and that membership could be revisited. Additionally, Rob revisited the idea of establishing a Steering Committee or similar body to set meeting agendas and guide the process. The group had the following input:

- One member disagreed with a stock-by-stock approach because they think that the CBC's focus should be on rebuilding salmon for the basin as a whole.
- One member stated they were open to discussion and restructuring the work group's proposed plans. Another member stated they were impressed with the potential of the I/RG and that they think adapting the current structure could be beneficial down the road.

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- Multiple members disagreed with the claim that the work groups are not doing stock-specific work. One member stated that the CBC is meant for basin-wide interests and within the recommendations, actions trickle down to stock-by-stock interest.
 - One member suggested that instead of changing the current structure, the I/RG should think about how to sequence the recommendations and integrate the science across the threat categories. One member stated that the work group already has the necessary expertise and raised a concern about creating additional layers of process as proposed in the letter.
 - A member stated that the I/RG should have conversations to provide direction to the autonomous work groups.

Due to time constraints, Liz shared that the I/RG will revisit this topic at a future meeting. Rob thanked everyone for discussing their proposal.

Next Steps

Liz thanked the group for their participation and invited Roland Springer, Bureau of Reclamation, to provide closing remarks.

Action Items

- **KW:** Incorporate the revisions to the Predation – Pinniped, Predation – Cormorant, Predation – Northern Pike, Predation – Piscine Predator management, and Blocked Area - P2IP recommendations and circulate to the full I/RG.
- **KW:** Coordinate with the Federal Representatives on language to clarify the Federal agencies' positions on recommendations
- **KW:** Follow-up on next steps on the Natural Origin Run Timing consensus recommendation
- **Habitat Work Group:** Work with Trout Unlimited staff on the NOAA 5-year review recommendation and Kevin Scribner re: landowner outreach components
- **KW:** Schedule a special session to hear updates on the SCEE and public forum concepts
- **KW:** Develop survey for I/RG feedback on the SIWG concepts
- **I/RG Reps:** Review the draft introductory text and share feedback.

Meeting adjourned at 4:00pm PT.